

## Feverish Haste of the British Government, the French Government and the American Navy to See Which Can Make the First Crossing of the Atlantic Ocean by Aeroplane

**O**DDLY coincident with the one hundredth anniversary of the first voyage by steamship across the Atlantic Ocean, it now appears from their feverish haste in preparation that either the United States, France or Great Britain will commemorate that epoch making voyage by making the first trans-oceanic aeroplane flight.

This flight, certain of achievement this Spring or Summer, will establish the new era of transoceanic travel, making the trip between Europe and America a matter of twenty-four hours instead of five days—as now—aboard the fastest steam vessels.

It is a little more than four hundred years ago that Christopher Columbus established contact between America and the old continent, crossing the ocean in his three diminutive caravels. This epochal voyage required thirty-seven days before the Italian discoverer sighted land on October 12, 1492.

Three centuries later, on May 22, 1819, the little wooden steamship *Savannah*, of 350 tons, set out under its own steam from the port of the same name in Georgia and a month later put into the Mersey in England. The event was heralded as the most significant of the age.

Although a remarkable and far reaching advance in the potential possibilities, the reduction in the length of time as against that of the former method was comparatively slight. After a period of three hundred years the time required for the trip was shortened only 20 per cent.

In these last one hundred years, however, the forward march of science and mechanics, as typified in the aeroplane, will reduce the time by five hundred per cent over existing ship facilities and by three thousand per cent as compared with the voyage of the *Savannah*.

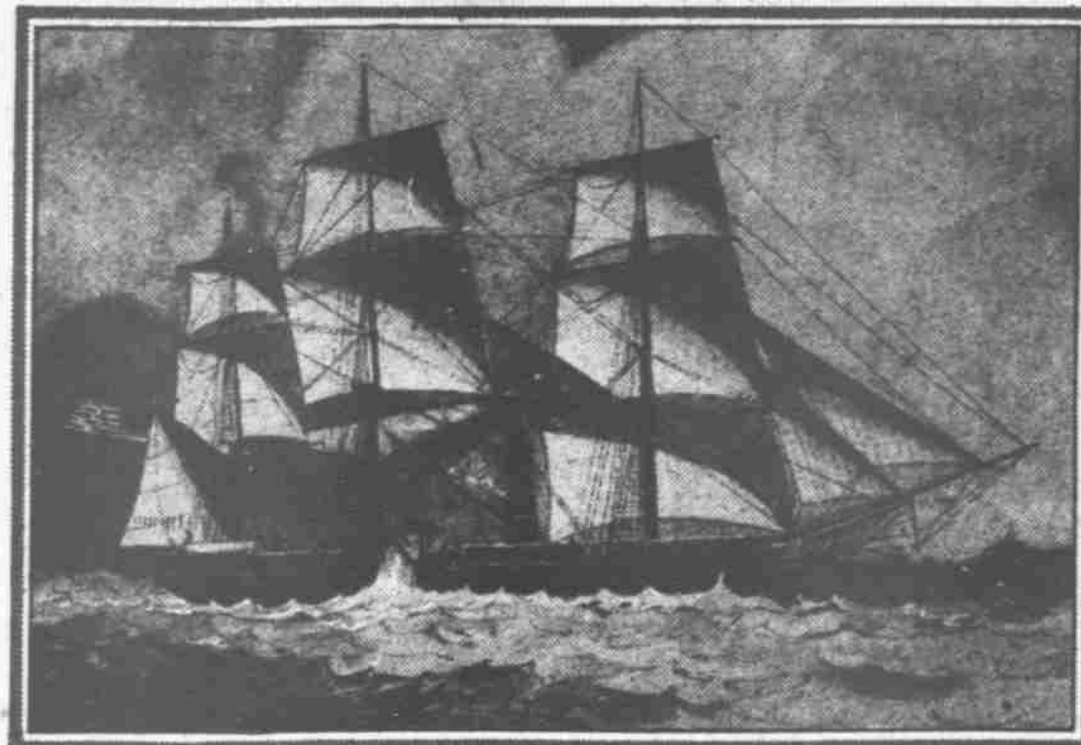
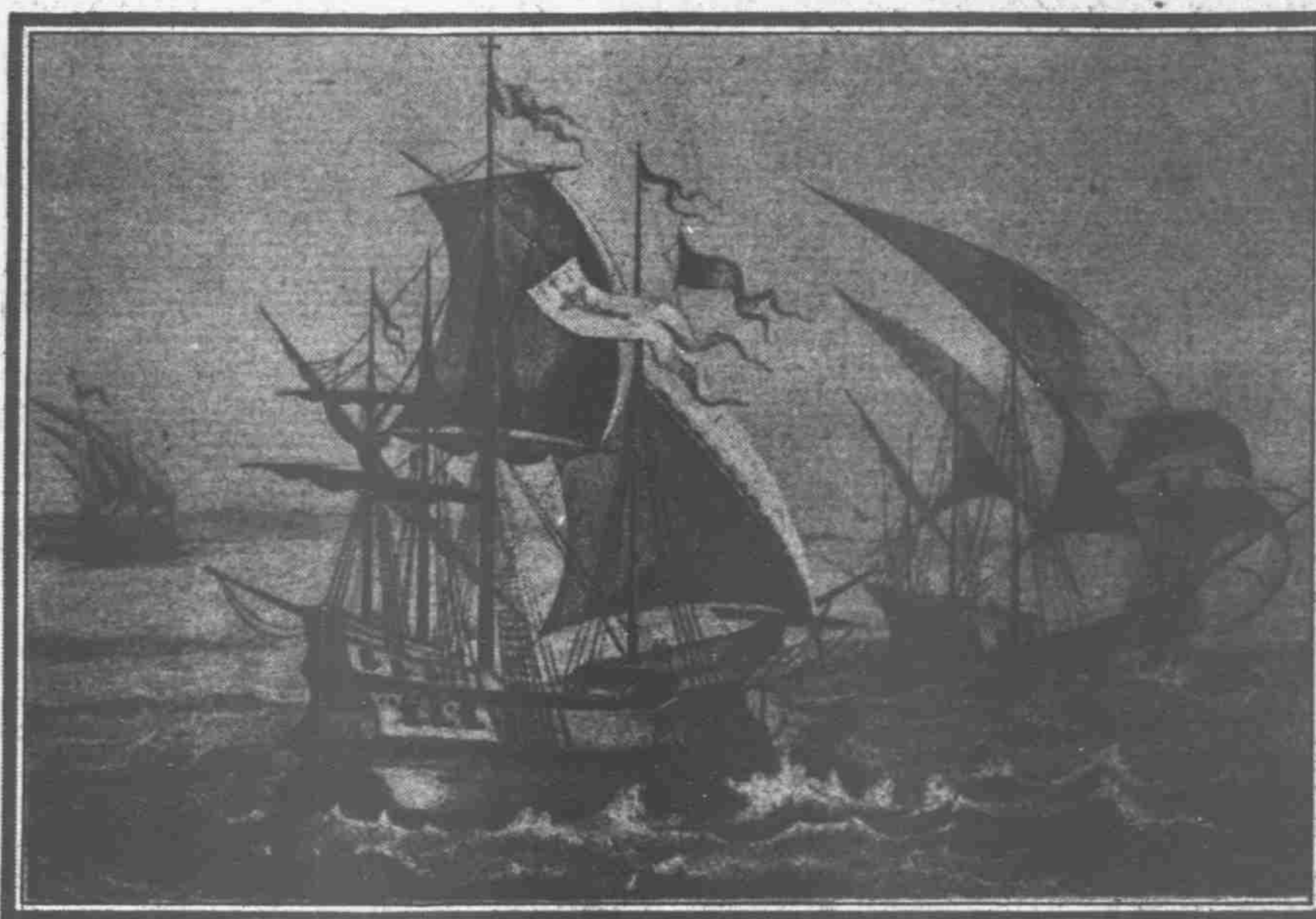
The honor of the first trip across the Atlantic redounded to the Spanish crown, for it was Queen Isabella who undertook the financing of the expedition. The United States owns the record for the premier voyage by steam. Now the most determined rivalry has developed between France, Great Britain and the United States in their efforts to gain the prestige that will fall to the nation first crossing the Atlantic by way of the air, and incidentally it would seem that the limit of mechanical transportation will have been reached when this is accomplished.

Great Britain's plans for the attempt are practically completed. The start of her aviators will be from St. John's, Newfoundland, and the flight will be—nothing interfering—as the crow flies, directly across to the Irish coast. This is the

shortest route between Europe and America, the distance being eighteen hundred and sixty miles. A party of air experts and meteorological authorities from Great Britain have already arrived at St. John's and are now conducting observations and making a thorough study of air conditions so as to determine the most advantageous time for the craft to start.

At the present writing there are two British machines which will seek to get away first. One is a Handley-Page flying boat built by the English Government and the other a Sopwith plane built by a private enterprise. Both machines have been shipped and are now on the high seas. The Sopwith plane will be piloted by

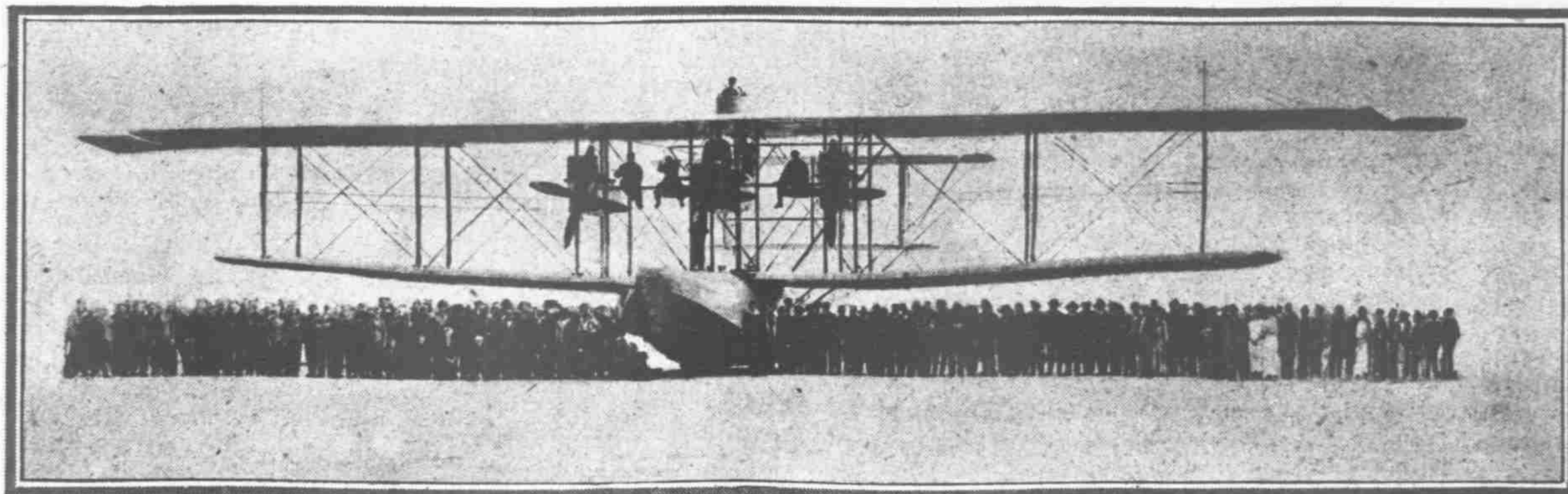
These Are the Three Caravels of Columbus the First Sailing Vessels to Cross the Atlantic. It Took Then 37 Days.



This Is the *Savannah*, the First Steamship to Cross the Atlantic. It Took 30 Days.

order to assure every chance of success the start will be made from the American side so as to receive the benefit of the favoring winds which are usually from the west. Hawker, who will fly at an altitude of from 15,000 to 20,000 feet, believes that his plane will cover an additional 50 miles per hour by receiving a steady push from the prevailing winds.

The French have not discussed their plans openly but it is known that preparations are under way to make the transatlantic effort. The French plane will pursue a course direct from Paris to New York. This distance is considerably greater than the route which Great Britain



This Photograph Is of the Gigantic U. S. Aeroplane Called the N. C. 1, the Type with Which Our Government Will Try to Be the First to Cross the Atlantic Ocean—in 24 Hours.

Harry G. Hawker, an Australian, who won the British altitude flight in 1915. He will be accompanied by Commander Mackenzie Grieve, Royal Navy. Hawker's machine is of the land type, but it has been fitted up so that it will remain aloft should it become necessary to descend. It carries a single motor of 375 horsepower and has been reported to have made a non-stop flight of 900 miles in nine hours and five minutes. Only one-third of the gasoline capacity was used on this trip, so the

fuel question is of no consequence. An ample surplus can be carried. The air speed of the Sopwith is 100 miles an hour, which is slightly faster than any of the giant machines which have been constructed in the United States for long flights. None of the mechanical details entering into the construction of the British Government's great Handley-Page seaplane have been divulged, but it is safe to assume that it is as large as, if not larger than, the various flying boats of the United

States Navy, which are now being overhauled and groomed at the Naval Air Station at Rockaway Point, L. I. Hawker will strive not only to make the first passage over the Atlantic, but hopes in addition to win the prize of \$50,000 offered by a London newspaper. The official Government craft will not enter for this prize.

In order to claim the award of the London newspaper the flight must be continuous. If the Government plane had to

and the United States have selected. The air distance from Paris is 4,000 miles.

The craft that will seek the laurel for France will be one of the "Goliath" type, recently turned out at the Farman works at Boulogne-sur-Seine. It is built along the lines of the F. 60, carries 20 passengers and has an air speed of 100 miles per hour. In its present form it is capable of flying continuously for 200 miles and when remodelled with pontoons and passenger capacity given over for fuel,

Diagram Showing the Three Routes Selected by the U. S., British and French Governments for Their Trans-Oceanic Flights. The Top, from Newfoundland to the Irish Coast, the English; Paris to New York the French; Hampton Roads to Bermuda to the Irish Coast the American.

descend to the water for any purpose—provided, of course, that it afterward completed the journey—this fact would not lessen the importance of its achievement. The same would hold true of the Sopwith, but making any such landing would disqualify any entry so far as the award of \$50,000 was concerned.

The dogged persistence of the British in seeking to triumph over the United States is evidenced by the fact that every natural advantage will be utilized as far as possible and no expense is being spared to this end. It has seemed unusual that the start should be made from this shore instead of from England or Ireland but in

order to assure every chance of success the start will be made from the American side so as to receive the benefit of the favoring winds which are usually from the west. Hawker, who will fly at an altitude of from 15,000 to 20,000 feet, believes that his plane will cover an additional 50 miles per hour by receiving a steady push from the prevailing winds.

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it is believed that the journey could be made without difficulty.

Several weeks ago Lieutenant Fontan, of the French aviation corps, started out for French Africa, where a base has been set up at Dakar, Senegambia. He was to have made a start from there with his immediate objective Pernambuco, Brazil. The distance between the two cities is about the same as that between St. John's and the Irish coast. He was compelled to delay his trip on the first lap due to a cracked cylinder in one of the motors. Lieutenant Fontan may also prove a formidable aspirant for transoceanic honors.

The United States will have more than one iron in the fire in the race to Europe. Four mammoth flying boats will comprise the squadron for the trial. If any one should become disabled another may be readily substituted. These machines are now at the air station at Rockaway point and mechanics are working in twenty-four hour shifts to get them in readiness.

The N. C.—Navy Curtiss—is the model that will be used. Besides this there are the N. C. 2, the N. C. 3 and the N. C. 4, under construction. Contrary to the schemes of the other nations, our naval authorities have provided against any contingency which might arise en route. The route selected starts at Hampton Roads, Va., thence to Bermuda and from there to the coast of Ireland. The total distance to be covered is about 3,200 miles. The first lap is 600 miles and the second 2,600 miles.

In order to prevent abandonment because of insufficient fuel, torpedo destroyers will be sent out and anchored along the course of the flight. These will be spaced about 200 miles apart. With this plan in operation refueling would be a matter of a few minutes, and of course greatly decrease the danger to pilots and crew should the aeroplanes be forced to descend to the water.

All four types will be equipped with three 400-horsepower Liberty Motors, each turning a separate propeller. The N. C. 1 when constructed had provisions for fifty passengers in addition to crew. Her live load capacity was then figured at four and one-half tons and she carried fuel for a cruising radius of thirteen hours.

This passenger capacity has now been converted into fuel space. The Liberty Motor consumes .55 pounds of gasoline per hour per horsepower. Therefore, its cruising radius will be increased some fourteen additional hours, giving a total of twenty-seven hours. It is said that other modifications have been made which will enable this model to carry enough fuel for a non-stop flight.

These types have an air speed of ninety miles an hour, but by taking advantage of favoring air currents the speed can be increased to considerably more than 100 miles per hour. Experts are of the opinion that a continuous flight can be made. In any event, the plan for mother ships for refueling will obviate any difficulty on this score.

The N. C. 1 during the past four months has become a familiar sight about New York and along the coast line, and this particular flying boat will have the honor of starting out as the representative of the United States. Commander John H. Towers, who has charge of all arrangements, has already appointed Lieutenant-Commander Patrick N. L. Bellinger, U. S. N., to pilot the transoceanic boat.

The wing spread of the N. C. 1 is 126 feet 6 inches from tip to tip. The wings are twelve feet wide. Three two-bladed propellers of the tractor type are used. The N. C. 2 has a total of three propellers, one pusher and two tractors, while the No. 3 model has three of the pusher type.